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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,135	06/30/2000	Jan-Dieter Spalink	FOV0001-US	9698
26108	7590	10/20/2004	EXAMINER	
DANIELS DANIELS & VERDONIK, P.A. SUITE 200 GENERATION PLAZA 1822 N.C. HIGHWAY 54 EAST DURHAM, NC 27713			DINH, MINH	
			ART UNIT	PAPER NUMBER
			2132	

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/608,135

Applicant(s)

SPALINK ET AL.

Examiner

Minh Dinh

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/30/2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment filed 06/28/2004. Claims 14, 16, 19-23 and 26 have been amended; claim 15 has been canceled and claim 27 has been added.

Response to Arguments

2. Applicant's arguments filed 06/28/2004 have been fully considered but they are not persuasive. Applicant argues that the Rupp reference fails to teach that data is collected as it is transmitted across the computer network, and associated with the anonymized identifier if the collected data is sent to or from one or more users to create a transaction record (page 9, 3rd paragraph). Rupp teaches data such as amount of traffic, IP addresses and port numbers is collected as it is transmitted across the computer network and that the data is associated with the anonymized identifier if the collected data is sent to or from one or more users to create a transaction record stored in a database (Section 2.2, User Interaction, Accounting and Billing, "User traffic is monitored ... network services are involved").

Applicant points out that Rupp does not show the anonymized identifier being associated with a classification (page 9, 4th paragraph). Rupp teaches the anonymized identifier being associated with a selected level of QoS (quality of service), which is a

classification (Section 2.2, User Interaction, Accounting and Billing, "User traffic is monitored ... network services are involved").

Regarding the Gabber reference, Applicant argues that there is no teaching of keeping track of user transaction data as recited in the claim and that impermissible hindsight has been used (page 10, 2nd paragraph). Gabber teaches creating an anonymized identifier using an obtained identifier (Abstract), which is not shown in the Rupp reference. The motivation for combining the reference is recited in the Abstract.

Regarding the "Census Geography" reference, Applicant argues that it fails to teach that other factors can be useful in classification for the purpose of recording and classifying transaction data concerning the use of the Internet as is recited in Applicants' claims. The main reference, Rupp, has already shown that QoS is used for the purpose of classifying transaction data concerning the use of the Internet. The "Census Geography" reference shows that other factors such as a geographical location, a Census block, a state or a zip code can also be used for the purpose of classifying data, which Rupp fails to teach.

Claim Objections

3. Claims 14 and 26-27 are objected to because of the following informalities:
 - a. Regarding claims 14 and 26-27, "an anonymized identifier" in the line next to the last line of each claim should be changed to "said anonymized identifier".
 - b. Regarding claim 26, the word "on" (9th line) should be changed to "and".
- Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4-5, 14-15, 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rupp et al. ("INDEX: A Platform for Determining how People Value the Quality of their Internet Access") in view of Gabber et al. (5,961,593).

a. Regarding claim 1, Rupp et al. disclose a method for collecting network usage data without associating personally identifiable information with the usage data comprising: obtaining an identifier representing one or more users of a computer network (section 2.1, second par.); collecting data being transmitted across the computer network; associating the anonymized identifier with the collected data if the collected data is sent to or from the one or more users to create a transaction record; and storing the transaction record in a database (section 2.2, third paragraph). Rupp et al. do not disclose how the anonymized identifier is created. Gabber discloses creating an anonymized identifier using the obtained identifier (see Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rupp and Gabber to include the step of creating an

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anonymized identifier using the obtained identifier, as taught by Gabber, so that the same user will be recognized by a consistent anonymized identifier.

b. Regarding claims 4 and 5, Rupp does not disclose that the anonymized identifier is created by applying a one-way hashing function to the obtained identifier and a security key. Gabber discloses that that the anonymized identifier is created by applying a one-way hashing function to the obtained identifier and a value, which meets the limitation of a security key (col. 9, lines 9 and 23-24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rupp and Gabber in claim 1 such that the anonymized identifier is created by applying a one-way hashing function to the obtained identifier and a security key, as taught by Gabber. The motivation for doing so would have been that the true identifier couldn't be determined from the anonymized identifier (col. 8, lines 39-42).

c. Regarding claim 14, Rupp discloses a method for collecting network usage data without associating personally identifiable information with the usage data comprising:

identifying a user of a computer network (section 2.1, second par.);

creating an anonymized identifier, said anonymized identifier being associated with a Quality of Service level, which meets the limitation of a classification; and

storing collected network usage data associated with an anonymized identifier in accordance with said classification (section 2.2, third paragraph). Rupp further discloses that the collected data is also used for billing purposes and, therefore, meets the limitation of network transaction data (section 2.2, third par.).

It is noted that the Applicant has put the limitation of claim 15 (canceled), "the anonymized identifier is associated with a classification", into claim 14 and used the phrase "identified with" in place of "associated with" without giving any explanation for the change. Thus, it is interpreted that there is no difference between the two phrases.

Rupp does not disclose how the anonymized identifier is created. Gabber discloses creating an anonymized identifier representing an identified user of the computer network (see Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rupp and Gabber to include the step of creating an anonymized representing the identified user of the computer network, as taught by Gabber, so that the same user will be recognized by a consistent anonymized identifier.

d. Regarding claim 15, Rupp further discloses that the anonymized identifier is associated with a Quality of Service level, which meets the limitation of a classification (section 2.2, third par.).

e. Regarding claim 24, Rupp discloses a method for associating anonymized identifiers to a classification comprising: obtaining an identifier representing one or more users of a computer network (section 2.1, second par.); creating a first anonymized identifier; creating a classification record by associating a Quality of Service level, which meets the limitation of a classification, with the first anonymized identifier; and storing the classification record in a database (section 2.2, third paragraph). Rupp et al. do not disclose how the anonymized identifier is created. Gabber discloses the step of creating an anonymized identifier using the obtained identifier (see Abstract).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rupp and Gabber to include the step of creating a first anonymized identifier using the obtained identifier, as taught by Gabber, so that the same user will be recognized by a consistent first anonymized identifier.

f. Claim 26 is a computing device to perform the method of claim 14 and is obvious for the same reasons.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rupp in view of Gabber as applied to claim 1 above, and further in view of Astrom et al.

(6,134,441). Rupp and Gabber do not disclose that the identifier representing the user is an MSISDN. Astrom discloses that an MSISDN is a unique identifier (col. 1, lines 56-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rupp and Gabber such that the obtained identifier is a MSISDN, as taught by Gabber, because it is a unique identifier representing a subscriber in GSM networks.

7. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rupp in view of Gabber as applied to claim 5 above, and further in view of Schneier ("Applied Cryptography").

a. Regarding claim 6, Rupp and Gabber do not disclose that the one-way hashing function is the SHA. Schneier discloses that SHA is a one-way hashing function (section 18.7, page 442). It would have been obvious to one of ordinary skill in the art

at the time the invention was made to modify the method of Rupp and Gabber such that the one-way hashing function is the SHA, as taught by Schneier, because the algorithm is used in the Secure Hash Standard and is required for Federal applications not requiring a digital signature.

b. Regarding claim 7, Rupp and Gabber do not disclose that the one-way hashing function is the MD4 algorithm. Schneier discloses that the MD4 algorithm is a one-way hashing function (section 18.4, page 436). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rupp and Gabber such that the one-way hashing function is the MD4 algorithm, as taught by Schneier, for better performance and simplicity.

c. Regarding claim 8, Rupp and Gabber do not disclose that the one-way hashing function is the MD5 algorithm. Schneier discloses that the MD5 algorithm is a one-way hashing function (section 18.5, page 436). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rupp and Gabber such that the one-way hashing function is the MD5 algorithm, as taught by Schneier, because it is an improved version of MD4.

d. Regarding claim 9, Rupp and Gabber do not disclose that the one-way hashing function is the DES algorithm. Schneier discloses that the DES algorithm can be used as a one-way hashing function (section 18.11, pages 446-447). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rupp and Gabber such that the one-way hashing function is the DES

algorithm, as taught by Schneier. The motivation for doing so would have been to use a symmetric block cipher algorithm as an alternative to other one-way hash functions.

8. Claims 3, 10-13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rupp in view of Gabber as applied to claim 1 and 15 above, and further in view of Ball et al. (6,446,200).

a. Regarding claim 3, Rupp and Gabber do not disclose that the obtained identifier is a static IP address. Ball discloses that a static IP address is a unique identifier (col. 14, lines 3-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rupp and Gabber such that the obtained identifier is a static IP address, as taught by Ball, because it is a unique identifier representing a network component.

b. Regarding claims 10, Rupp and Gabber in claim 1 do not disclose that the step of obtaining an identifier representing one or more users of a computer network includes: receiving packets sent by an authentication server and extracting an identifier from the received packets. Ball discloses a method for collecting data usage network comprising the steps of receiving packets sent by an authentication server and extracting an identifier from the received packets (see fig. 1 and col. 9, line 17). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rupp and Gabber to include the steps of receiving packets sent by an authentication server and extracting an identifier from the received packets, as taught by Ball, so that data of various types and formats can be handled (col. 3, lines 32-35).

c. Regarding claims 11-12, they differ from claim 10 in that the authentication server is a RADIUS server and that the received packets are RADIUS packets. Ball further discloses that the authentication server is a RADIUS server and the received packets are RADIUS packets (see fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of claim 10 such that the authentication server is a RADIUS server and the received packets are RADIUS packets, as taught by Ball, because RADIUS is a well-accepted standard in the industry and is used across a number of different types of technologies (col. 3, lines 48-51).

d. Regarding claim 13, Rupp and Gabber do not disclose that the authentication server is a DHCP server. Ball discloses that the authentication server is a DHCP server (see fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rupp and Gabber such that the authentication server is a DHCP server, as taught by Ball, so that data of various types and formats can be handled (col. 3, lines 32-35).

e. Regarding claim 22, Rupp and Gabber in claim 15 do not disclose that the classification includes one from the group consisting of: wireless, satellite, dialup, DSL, and ISDN. Ball discloses that the classification includes wireless or ISDN (fig. 3; col. 5, lines 50-53, 57-63). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rupp and Gabber such that the classification includes wireless or ISDN, as taught by Ball, so that data collected from various sources can be differentiated for analysis.

9. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rupp in view of Gabber as applied to claim 15 above, and further in view of "Census Geography". Rupp and Gabber do not disclose that the classification is a geographic location, a Census block, a state or a zip code. The "Census Geography" reference discloses that geographic locations such as a Census block (page 2), a state (page 1) or a zip code (page 3) are used as classifications in methods for collecting data. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rupp and Gabber such that geographic locations such as a Census block, a state or a zip code are used as classification, as taught in "Census Geography", in order to protect the confidentiality of the collected information (see page 5).

10. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rupp in view of Gabber as applied to claim 15 above, and further in view of "National Center For Education Statistics". Rupp and Gabber do not disclose that the classifications used in data collection includes a telephone area code or a telephone exchange number. The "National Center For Education Statistics" reference discloses that the classification includes a telephone area code (page 11) or a telephone exchange number (page 6) is used in a method for collecting data. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rupp and Gabber such that the classification includes a telephone area

code or a telephone exchange number, as taught in "National Center For Education Statistics", in order to protect the confidentiality of the collected information.

11. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rupp in view of Gabber as applied to claim 15 above, and further in view of "Results of the 1998 NASFAA Salary Survey". Rupp and Gabber do not disclose that the classification is a job function code. The "Results of the 1998 NASFAA Salary Survey" reference discloses that a job category title, which meets the limitation of a job function code, is used as a classification in data collection (see table "Change in Annual Full-Time Salaries"). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rupp and Gabber such that the classification is a job function code, as taught in "Results of the 1998 NASFAA Salary Survey", in order to classify collected data based on job functions.

12. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rupp in view of Gabber as applied to claim 24 above, and further in view of Stallings ("Cryptography And Network Security"). Rupp further discloses the steps of collecting data being transmitted across the computer network; associating the first anonymized identifier with the collected data if the collected data is sent to or from the one or more users to create a transaction record; and storing the transaction record in a database (section 2.2, third paragraph). However, Rupp and Gabber do not disclose creating a second anonymized identifier using the first anonymized identifier and associating the

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second anonymized identifier with the collected data. Stallings discloses hashing a hash result (section 9.4, page 295), which is equivalent to creating a second anonymized identifier using the first anonymized identifier. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rupp and Gabber to include the step of creating a second anonymized identifier using the first anonymized identifier, as taught by Stallings, and use it in the associating step. The motivation for doing so would have been to make it much more difficult to determine the user's identifier based on the second anonymized identifier (page 297).

13. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rupp in view of "Census Geography". Rupp discloses a method for collecting network usage data without associating personally identifiable information with the usage data comprising:

- identifying a user of a computer network (section 2.1, second par.);

- creating an anonymized identifier representing the user, said anonymized identifier being associated with a classification; and

- storing collected network usage data associated with said anonymized identifier (section 2.2, third paragraph). Rupp further discloses that the collected data is also used for billing purposes and, therefore, meets the limitation of network transaction data (section 2.2, third par.).

It is noted that, for the limitation "said anonymized identifier being associated with a classification" (5th line), the Applicant has used the phrase "identified with" in place of "associated with" (Specification, p. 16, line 17 and canceled claim 15) without giving any explanation for the change. Thus, it is interpreted that there is no difference between the two phrases.

Rupp does not disclose that the classification is a geographic location, a Census block, a state or a zip code. The "Census Geography" reference discloses that geographic locations such as a Census block (page 2), a state (page 1) or a zip code (page 3) are used as classifications in methods for collecting data. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rupp and Gabber such that geographic locations such as a Census block, a state or a zip code are used as classification, as taught in "Census Geography", in order to protect the confidentiality of the collected information (see page 5).

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

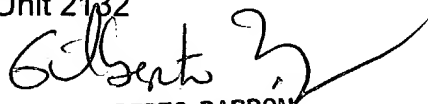
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dinh whose telephone number is 703-306-5617. The examiner can normally be reached on Mon - Fri: 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 703-305-1830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MD
09/30/04

MD
Minh Dinh
Examiner
Art Unit 2132


GILBERTO BARRON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100